

Vibration Monitor VS11



Application

- Vibration monitoring in time or frequency domain
- Monitoring of vibration velocity (severity) of rotating machinery to ISO 20816-1
- Vibration monitoring of reciprocating engines to ISO 10816-6
- Monitoring of pumps, compressors, centrifuges, ventilators, mills, and mixers
- Monitoring of bearing vibration with frequency analysis
- Emergency shut-off or alarm tripping in case of increasing vibration
- Production quality control

Properties

- Built-in piezo accelerometer
- Intelligent vibration switch with extended functionality
- Monitors vibration acceleration and velocity
- 60 frequency ranges from 0.1 to 10 000 Hz for RMS and peak values programmable
- FFT with 10 free adjustable alarm bands for frequency selective monitoring
- Indication of warning and alarm by flashing LEDs
- Parameter setup via USB
- Teach-in function for automatic threshold setting
- Robust and waterproof aluminum case
- Connection via spring terminals

Technical Data

Measurement functions

Measurands	Vibration acceleration	
	Vibration velocity/severity	
Overall values	True RMS value	
	True pak value	
Measuring range acceleration	0.1 to 1000	m/s ²
Measuring range velocity	1 bis 1000	mm/s
Voltage gain	1; 10; 100; autoranging	
Accuracy	±1 (> 10 % of full scale; mid-band)	%
ADC resolution	24	Bit
Lower frequency limit acceleration	0.1; 2; 5; 10; 20; 50; 100; 200; 500; 1000	Hz
Lower frequency limit velocity	2; 5; 10	Hz
Upper frequency limit acceleration	100; 200; 500; 1000; 2000; 5000; 10000	Hz
Upper frequency limit velocity	1000	Hz
Frequency analysis	FFT	
	360 points	
	2 to 1000 or 20 to 10000 Hz	
	Spectral monitoring with limit line of 10 free frequency bands	
	FFT transmission via USB	

Connectors

Input channels	1	
Relay output	PhotoMOS relay; 60 VAC; 0.5 A; spring terminals	
Relay trip delay	0 to 99; via interface	s
Relay hold time	1 to 9; via interface	s
Digital interfaces	USB 2.0 FS; Micro; internal	
	CDC mode; ASCII command set	

Power Supply

External supply voltage	5 to 30	VDC
External supply current	<100	mA
Supply connection	Spring terminals	
	USB Micro; internal	

Case Data

Dimensions without connectors	50 x 52 (ø x H)	mm
Case material	Aluminum; Nickel coated	
Weight	160	g
Protection grade	IP67	
Operating temperature range	-40 to 80 (95 % rel. humidity without condensation)	°C

Notice For the setup via USB or RS-485 a free software tool is provided.

